

# A conceptual model of heritage dimensions and agrotourism: Perspective of Nandi County in Kenya

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Conceptual frameworks have previously been used to give a structure to research that essentially simplifies thinking and clarifies issues, while at the same time providing a common reference point. Agrotourism is fast emerging as a key player in the activation of rural economies. An understanding of the interplay between variables that may help sustain agrotourism no doubt provides an avenue through which the practice can be exploited. The aim of this paper is to develop a conceptual model that can explain the interrelationship between heritage dimensions and agrotourism. It envisages that such a model can provide the basis upon which researchers can investigate ways of exploiting the abundant heritage dimensions in Nandi County.

**Keywords:** agrotourism, agrotourism model, conceptualisation, heritage dimensions

## Introduction

A conceptual framework plays a crucial role in setting the stage for research by identifying variables required, and the interrelationship between them (McGaghie, Bordage & Shea, 2001). Increasing problems in the agricultural sector create negative attitudes in the farmers regarding agriculture, hence there is an extreme need to identify variables that can be manipulated to create additional sources of income using existing agricultural land and agricultural occupations. Tourism and agriculture are Kenya's largest industries and provide key sources of income for many groups. The sectors play a pivotal role in the country's economy, and their improvements have the potential to contribute further to the development of these industries. In the face of the current problems of climate change, rising food prices and a global financial crisis, linkages between agriculture and tourism may provide the basis for new solutions in Kenya. Whereas studies have been undertaken on many forms of tourism in several continents including Kenya, few studies seem to have been done on linking heritage and agrotourism, particularly in Kenya. The purpose of this study is therefore to develop a conceptual model that relates heritage dimensions and agrotourism in Nandi County in Kenya.

## Literature review

Existing empirical literature identifies three dimensions that have previously been associated with agriculture-driven tourism. They include cultural, natural, and digital heritage (Bowitz & Ibenholt, 2009; Vrsaljko & Cukelj, 2015; Zhao, Kirk, Bowen & Wright, 2018). Besides, evidence in the extant literature points to the potential involvement of push-up and push-down factors (Colton & Bissix, 2005; Mansor & Mat, 2010).

## Cultural heritage and agrotourism

Evidence in existing literature vindicates the positive impact cultural heritage has on sustainable agrotourism, albeit through its proxies. Bowitz and Ibenholt (2009) investigated the economic impacts of cultural heritage. These scholars were buoyed by claims that investment in cultural heritage empowers local economies in terms of increased employment opportunities and income. Focusing on the Norwegian town of Roros, they established that the cultural heritage supports tourism in the region, and this contributes close to seven per cent of overall employment and income. The findings by Bowitz and Ibenholt (2009) definitely contribute to the literature showing that cultural heritage can be exploited for gainful purposes. The study, however, was conducted in a context other than Kenya. The question then is whether similar findings could be replicated in the Kenyan context and, in particular, in relation to agrotourism.

In yet another study focusing on the impacts of cultural heritage, Rungnapha (2015) examines the effect of cultural heritage on sustainable agriculture. Rungnapha was motivated by the knowledge that rural communities have cultural heritage that can be harnessed to attract agrotourism growth. The study was conducted in the Chiang Khan District in Thailand which is noted to have unique cultural and architectural heritage resources (Rungnapha, 2015). Using a survey whose results were analysed using frequencies and percentages, the author revealed that facets of agricultural villages such as lifestyles in the rural villages, natural resources and agricultural practices reminiscent of rural areas, are key existing features that develop and sustain agrotourism.

The study further identified abundance in cultural and natural assets, uniqueness in the beauty of the village landscape and a geography that is quite interesting as ideal elements for sustainable agrotourism. Despite the fact that the study by Rungnapha was conducted in Thailand and involved a

survey, it is important to note that the study highlights natural and cultural features that support tourism. It is therefore appropriate to postulate that sustainable agrotourism can thrive in Nandi County because the area enjoys features similar to those identified in the study by Rungnapha (2015).

Nocca (2017) examined the role cultural heritage plays in sustainable development. Nocca's study was driven by the fact that most of what is known of sustainable development remains mostly theoretical. The study conducted a critical analysis of 40 case studies, and established that most studies refer to sustainability, and yet they hardly address it concretely with most of them highlighting only the economic component at the expense of the environmental and social components. The study further found that impacts attributed to cultural projects are often interpreted only in terms of real estate or tourism. The question to pose here is what difference would it make to include environmental and social components? We contend that manipulation of the abundance of cultural heritage in Nandi County has the potential to boost tourism. Our conceptualisation is therefore that cultural heritage relates directly with tourism growth in Nandi County.

#### ***Natural heritage and agrotourism***

Natural heritage features prominently in the extant literature as having direct impacts on agrotourism through its proxies of agriculture and tourism. Vrsaljko and Cukelj (2015) analysed natural heritage as a paradigm for agrotourism development. Motivated by the knowledge that Krapina-Zagorje County in Croatia in which the study was conducted has untapped potential for the development of agrotourism, these scholars used a descriptive approach to conclude that tourism needs to use the heritage elements such as natural heritage for purposes of sustaining development in rural areas. They noted that idyllic picturesque landscapes, untouched and protected parts of nature, and diverse flora and fauna found in the wild can be tapped for their potentiality to attract and fascinate visitors. Given the abundance of natural heritage in Nandi County, the proposed study posits that conclusions such as those made by Vrsaljko and Cukelj (2015) can be exploited to benefit locals in this county.

Lo, Mohamad, Chin and Ramayah (2017) examined the impact that natural resources have on tourism destination competitiveness under the support of the local community. The study conducted in the Malaysian context adapted the quantitative approach and used a questionnaire as the principal data collection tool. Using the two-step analysis approach, the study established that natural resources, alongside cultural heritage and special events, positively and significantly correlated with tourism destination competitiveness. It is the postulation of the proposed study that a model that mixes heritage dimensions has the potential to maximise the growth of agrotourism. We therefore conceptualise that natural heritage also relates directly with agrotourism in Nandi County.

#### ***Digital heritage and agrotourism***

The impacts of digital heritage as a strategic aspect of tourism promotion have been documented. Zhao et al. (2018) assessed the role of interactive technology in enhancing the appreciation of traditional Chinese painting. The study by Zhao and colleagues was motivated by the abundance in philosophical and cultural history inherent in Chinese ink painting. The study

utilised an open-ended discussion and subjective interpretation of diverse cultural backgrounds of workshop participants to analyse their appreciation of Chinese painting. Collated audio transcripts were critically examined and analysed thematically. The scholars concluded that digital interactive technology supports cross-cultural artistic appreciation of the rich Chinese cultural heritage manifested by ink painting.

The point brought out in the study by Zhao et al. (2018) is that digitising cultural heritage exposes opportunities arising from latent cultural heritage that can interest tourists. In addition, the ability of the digital interactive technology to enhance appreciation of Chinese ink painting is quite significant. It emphasises the impact of digitalisation in supporting creativity in the provision of innovative tourism services that build on cultural heritage. We then wonder whether the rich cultural heritage found in Nandi County has been digitalised and what impact such digitalisation is having on agrotourism.

López et al. (2018) conducted a review of the heritage building information model. An understanding that despite efforts being increased for the protection, restoration, dissemination and conservation of cultural heritage, there is a lack of appropriate digital models for the planning and management of such projects drove López and colleagues. By exhibiting a critical review of existing technical and scientific literature, López et al. concluded that access to a virtual model representing a historical monument provides a means for planning and managing projects that require conservation and restoration. The implication of these findings is that digital heritage can be enriched through appropriate models. The study does not, however, state clearly how conservation and restoration of cultural heritage in digital form impacts on tourist attraction and by extension on agrotourism.

Roussou and Katifori (2018) evaluated the experiences of mobile museum narrative users. The study was based on the knowledge that mobile technology plays a crucial role in shaping the way cultural institutions capture storytelling experiences for visitors (Tallon & Walker, 2008). Roussou and Katifori used an array of evaluation methods that included ethnography, questionnaires, and in-depth interviews to examine users' experiences. Using thematic analysis, they established that an understanding of whether user experiences were effective or not in a context rich in cultural heritage is quite complex.

Despite decoding user experiences as being complex, the study by Roussou and Katifori (2018) went on to show that storytelling, as a digital approach to culture, contributes more to visitor experiences. These findings capture a very significant element needed in museums and other historical sites, the need to digitise narratives so that visitors benefit from personalised interactive storytelling experiences. Roussou and Katifori, however, failed to articulate the impact of digitalised storytelling on sustainable tourism with respect to museums. The question that arises is whether digitalising various natural and cultural heritage facets such as found in Nandi County could have an impact on sustainable farm level tourism. We conceptualise that, indeed, manipulating the digital dimension of heritage could impact directly on agrotourism in Nandi County.

#### ***Push-up factors***

The divergence in definitions surrounding activities associated with agrotourism is such that appropriate agrotourism

classification systems are still elusive. According to Philip, Hunter and Blackstock (2010), agrotourism satisfies three criteria: the activity undertaken by the farm; the degree to which tourists are in contact with agricultural activities; and the true and authentic visitor experiences. The argument posited here is that factors other than heritage dimensions have the potential to either push agrotourism upwards or push it downwards. Torres and Momsen (2004), for instance, point out that the introduction of tourism in rural areas is generally perceived positively in the belief that a combination of tourism and agriculture can link the labour forces in the two sectors.

Adam (2002) concurs with Philip et al.'s (2010) views in stating that factors that include educational tours, festival events and historical recreations which visitors can see, together with petting zoos and hay rides that visitors can participate in, complement items such as food, souvenirs, and drinks in pushing up agrotourism. Defining agrotourism as a commercial enterprise conducted at any agricultural site, and which includes horticulture and agribusiness, the Alabama cooperative extension system (Chesnutt, 2007), observes that the agrotourism experience is multifaceted. Consequently, agrotourism has activities such as farm visits and stays, barn dances, hay rides, camping and picnicking, guided crop tours, wildlife viewing, trap and skeet shooting, hunting and fishing, among others.

The significant of these activities is that agrotourism is not only a function of heritage dimensions, but does also depend on a variety of factors that end up acting as push-up factors. Another factor that features prominently in the discourse on agrotourism is location. Hilchey and Kuehn (2001) contend that although it is not everything, the destination location plays an important role in appealing to the diversity in tastes among the clientele drawn from various destinations of the world. Proximity to centres, existence of other tourist attractions and the relative ease of finding the location are, for instance, deemed crucial push-up factors that complement heritage dimensions (Hilchey & Kuehn, 2001).

Mansor and Mat (2010) also identify infrastructure as a vital cog in the growth of agrotourism. They point to facilities such as the availability of travel agents, transport, and phone connectivity as important factors that can help push up the growth of agrotourism. Noting that local regulations are in the realm of infrastructure, Rilla (1999) points out that potential agrotourism operators need to be well versed with specific policies and regulations that govern potential agrotourism sites.

Suffice it to say that Nandi County has a terrain and infrastructure that could be loaded with potential factors that can provide supplementary impacts to those experienced from heritage dimensions. In view of this, we conceptualise that push-up factors are extraneous factors in Nandi County that have the potential to affect the growth of agrotourism in the county.

#### **Push-down factors**

Other than factors that can lead to growth in agrotourism, the extant literature is awash with other factors that are likely to suppress this growth. Lack (1997), for instance, identifies low of training levels, quality control, marketing knowledge, finance, excessive regulations and personal challenges as factors that limit the growth of agricultural-oriented tourism. Other challenges that have extensively been reported with

regard to agrotourism include lack of funds for publicity and advertisement (Shehrawat, 2008), small farm sizes and lack of requisite skills (Malkanathi & Routry, 2011b), weak communication skills, and the lack of a commercial approach (Kumbhar, 2010).

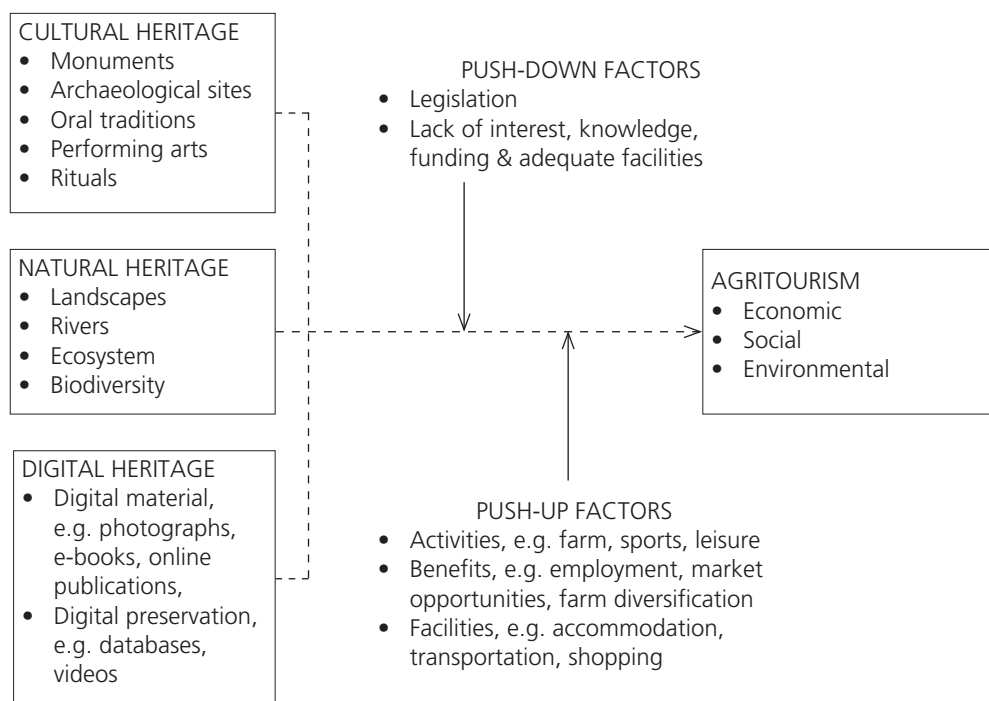
People-related factors are also identified in the literature as having the propensity to deter the growth of agrotourism. Hilchey and Kuehn (2001) argue that agrotourism requires people involved in the business to show enthusiasm, and to be able to handle emerging issues tactfully, willingly, and with a sense of humour. They observe that staff friendliness is a key motivation in choosing to visit an agrotourism site. Visitors expect good service, courtesy, pleasantries, and sincerity. Lack of such important people attributes could therefore be significant in the growth of agrotourism. We question whether such people-related factors could be at the centre of the lack of exploitation of agrotourism in Nandi County, and postulate that they have the ability to moderate the anticipated relationship between heritage dimensions and agrotourism.

Cleanliness and maintenance of the farm wishing to engage in agrotourism is also identified as a possible push-down factor. According to Hilchey and Kuehn (2001), manure, for instance, may "smell like money" to the farmer, but some city people may find the smell unpleasant. People complaining about odours can ruin the experience for everyone. In addition to the cleanliness and maintenance of the farm, it may be worthwhile to develop signs, picnic areas, landscaping, toilet facilities, and trails to meet the needs of visitors and make the site unique and memorable. It is not necessarily advisable, however, that agrotourism operators put up expensive new buildings, fences, or other improvements that add considerable cost to the start-up of the operation. This should be done if a venture demonstrates its tourism potential as a destination, for it is generally unwise to invest large sums of money on capital improvements in a destination that is not receiving visitor numbers to generate cash flows that can pay back the investment. If an agrotourism business is to grow and attract repeat customers, it is important to periodically improve the appearance, facilities, and attractions of the site.

The growth of agrotourism in Africa is reportedly suppressed by, among other factors, incessant outbreaks of diseases (Le Gall & Leboucq, 2004), and land grabbing for large-scale commercial agriculture (Malkanathi & Routry, 2011a). Besides, the survival of agriculture and tourism in Africa relies mainly on external markets (Schoneveld, 2011). There is no doubt that agrotourism growth remains a challenging endeavour. However, the identification of factors that are likely to limit this growth can go a long way to achieving improved levels of expected practices. We conceptualise that push-down factors tend to moderate the relationship between heritage dimensions and growth of agrotourism in Nandi County.

#### **Conclusion**

The abundant wealth of agricultural and tourism potential available in Nandi County could be the panacea to emerging challenges of climate change, rising food prices and an ongoing financial crisis. A linkage of agriculture and tourism in the form of agrotourism has the ability to exploit the various heritage dimensions to entertain and educate visitors, while at the same time generating income for the locals. The review of existing



Sustainable agrotourism =  $\beta_0 + \beta_1$  Heritage dimensions +  $\beta_2$  Push-up/down +  $\beta_3$  Interaction between Heritage dimensions and Push-up/down factors

**Figure 1:** Conceptual framework

literature provides enough evidence that manipulations of heritage dimensions are likely to spur growth in agrotourism in Nandi County. However, factors in the context within which agrotourism are being practised have the potential to moderate any impacts heritage dimensions may have on agrotourism.

### Conceptual model

We therefore conceptualised a model that depicts the relationship between heritage dimensions and agrotourism in Nandi County. The model assumes that cultural heritage, natural heritage and digital heritage have the potential to act as catalysts in exploiting agrotourism opportunities. Collectively the independent variables of heritage dimensions could build on the potential of agrotourism in Nandi County. In addition, push-up and pull-down factors depict moderating variables that need to be investigated if the full potential of heritage dimensions has to be felt. We therefore propose the conceptual model with the associated conceptual framework (see Figure 1) addresses the moderating influence of push-up/down factors on the relationship between heritage dimensions and agro tourism.

### Note

1. The concept of agrotourism, as a direct expansion of ecotourism, encourages visitors to experience agricultural life at first hand.

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